



## INVESTIGATOR'S ANNUAL REPORT

United States Department of the Interior  
National Park Service

All or some of the information you provide may become available to the public.

OMB # (1024-0236)  
Exp. Date (11/30/2010)  
Form No. (10-226)

<b>Reporting Year:</b> 2006	<b>Park:</b> Shenandoah NP	<b>Select the type of permit this report addresses:</b> Scientific Study	
<b>Name of principal investigator or responsible official:</b> Kurt Reinhart		<b>Office Phone:</b> (812) 855-1674	
<b>Mailing address:</b> Indiana University  Dept. of Biology  Jordan Hall Rm 127, 1001 East  3rd St.  Bloomington, IN 47405- Bloomington, IN 47405-3700 US		<b>Office FAX</b> (812) 855-6705 <b>Office Email</b> kureinha@indiana.edu	
<b>Additional investigators or key field assistants (first name, last name, office phone, office email)</b> No co-investigators			
<b>Project Title (maximum 300 characters):</b> The Role of Soil-borne Pathogens in Forest Dynamics and Disease			
<b>Park-assigned Study or Activity #:</b> SHEN-00331	<b>Park-assigned Permit #:</b> SHEN-2006-SCI-0015	<b>Permit Start Date:</b> Sep 18, 2006	<b>Permit Expiration Date:</b> Dec 31, 2008
<b>Scientific Study Starting Date:</b> Sep 18, 2006		<b>Estimated Scientific Study Ending Date:</b> Dec 31, 2006	
<b>For either a Scientific Study or a Science Education Activity, the status is:</b>  Continuing		<b>For a Scientific Study that is completed, please check each of the following that applies:</b>  <input type="checkbox"/> A final report has been provided to the park or will be provided to the park within the next two years  <input type="checkbox"/> Copies of field notes, data files, photos, or other study records, as agreed, have been provided to the park  <input type="checkbox"/> All collected and retained specimens have been cataloged into the NPS catalog system and NPS has processed loan agreements as needed	
<b>Activity Type:</b> Inventory			
<b>Subject/Discipline:</b> Soils			

**Purpose of Scientific Study or Science Education Activity during the reporting year (maximum 4000 characters):**

The objective of this project is to create a long term collection of soil-borne pathogen isolates (primarily *Pythium* spp.) from the eastern United States. Seedlings will be used to isolate soil-borne pathogens which will be maintained in long term cultures. Future experiments will test the host-specificity of the isolates. These isolates will be maintained in a long term culture and will likely be used further down the road in additional experiments regarding large-scale biogeographical variation in pathogen virulence (e.g. latitudinal variation) and the effect of climate change on forest disease.

**Findings and status of Scientific Study or accomplishments of Science Education Activity during the reporting year (maximum 4000 characters):**

I have performed pathogen isolations on over 100 samples from throughout the eastern USA and have established long term cultures. Experiments and other studies using these isolates are currently on hold.

**For Scientific Studies (not Science Education Activities), were any specimens collected and removed from the park but not destroyed during analysis?**

Yes

**If "Yes", identify where the specimens currently are stored:**

They are currently stored at Indiana University.

**Funding specifically used in this park this reporting year that was provided by NPS (enter dollar amount):**

\$0

**Funding specifically used in this park this reporting year that was provided by all other sources (enter dollar amount):**

\$0

**List any other U.S. Government Agencies supporting this study or activity and the funding each provided this reporting year:**

**Paperwork Reduction Act Statement:** A federal agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. Public reporting for this collection of information is estimated to average 1.625 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms. Direct comments regarding this burden estimate or any aspect of this form to Dr. John G. Dennis, Natural Resources (3127 MIB), National Park Service, 1849 C Street, N.W., Washington, DC 20240.